NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Earth Science The Atmosphere (Chapter 22 Outline)**

***AS YOU READ, RESPOND TO THE FOLLOWING:***

*Vocabulary*: **Define in your own words**

Atmosphere-

Ozone-

Atmospheric pressure-

Electromagnetic spectrum-

Albedo-

Greenhouse effect-

Conduction-

Convection-

Polar easterlies-

Jet stream-

*Respond to the following:*

Describe the composition of Earth's atmosphere. Be specific. (2 pts)

Identify and describe in detail each layer in Earth's atmosphere. Discuss temperature and distance from Earth's surface for each layer. (4 pts)

Describe four possible sources of particulates in the atmosphere. (4 pts)

How does the ozone layer protect the Earth from UV radiation? Explain. (2 pts)

Explain how radiant energy reaches Earth. (1 pt)

How does visible light and infrared energy warm Earth? Explain. (2 pts)

Identify two factors that from local wind patterns. Describe each factor in detail. (2 pts)

***ABOUT THE READING:***

Write three things that you learned about the Atmosphere*:*

***Make sure to write a full sentence.***

*Example: I learned that water at a low sun angle reflects a large amount of solar radiation compared to most surfaces.*

*1.*

*2.*

*3.*

***Assigned work****: The ice at the polar regions of Earth contribute greatly to the albedo effect, which helps reduce absorption of thermal energy on Earth. Why is the disappearing ice a concern in terms of the albedo effect? What is a solution to this problem?*

*In a short paragraph, discuss the polar regions contribution to the Earth's albedo effect, why disappearing ice matters, and propose a possible solution to the problem. (Worth 8 pts)*